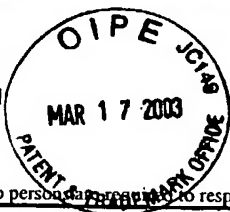


Please type a plus sign (+) inside this box → [+]



Approved for use through 10/31/2002 OMB 0651-0031
Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person shall be required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

SHEET 1 of 1

COMPLETE IF KNOWN

Application Number	10/014,377
Confirmation Number	1041
Filing Date	December 11, 2001
First Named Inventor	Raul Victorino Nunes
Group Art Unit	1761
Examiner Name	Not Yet Assigned
Attorney Docket Number	8624

U. S. PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No. ¹	DOCUMENT NUMBER Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
NP		3,057,734	Oct. 9, 1962	Pader	
		3,558,768	Jan. 26, 1971	Klippel	
		5,853,761	Dec. 2, 1998	Kumabe, et al.	
		6,099,876	Aug. 8, 2000	Nussinovitch	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No. ¹	FOREIGN PATENT DOCUMENT Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶
NP		CN 1,110,535 A	Oct. 25, 1995	Shun-lun He		X
		EP 0 146 904 A2	Jul. 3, 1985	Lancia		
		EP 0 336 894 A1	Oct. 11, 1989	Shawn, et al.		
		EP 0 512 855 A2	Nov. 11, 1992	Cilento, et al.		
		EP 0 853 888 A1	Jul. 22, 1998	Warendorf		
		GB 915 389	Jan. 9, 1963	Grindstedvaerket AS		
		GB 2 087 212 A	May 2, 1982	Delion, et al.		
		JP 11056315	Mar. 2, 1999	Mikiko		
		WO 93/08704	May 13, 1993	Bunger, et al.		
		WO 97/39170	Oct. 23, 1997	Kershaw, et al.		

OTHER ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
EXAMINER		DATE CONSIDERED	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C. 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB08A (08-00)

Approved for use through 10/31/2002 OMB 0651-0031
Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

COMPLETE IF KNOWN

Application Number	10/014,377
Confirmation Number	
Filing Date	December 11, 2001
First Named Inventor	Raul Victorino Nunes
Group Art Unit	
Examiner Name	
Attorney Docket Number	8624

U. S. PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No. ¹	U.S. PATENT DOCUMENT Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
[Signature]	1	3,658,552		Carlson, et al.	Apr. 25, 1972	
	2	4,187,326		Serafino, et al.	Feb. 5, 1980	
	3	4,276,311		Burrows, et al.	Jun. 30, 1981	
	4	4,504,504		Gaehring, et al.	Mar. 12, 1985	
	5	4,529,613		Mezzino, et al.	Jul. 16, 1985	
	6	4,612,204		Huffman	Sep. 16, 1986	
	7	4,619,883		Anderson	Oct. 28, 1986	
	9	5,356,654		Speirs, et al.	Oct. 18, 1994	
	10	5,385,748		Bunger, et al.	Jan. 31, 1995	
	11	5,498,702		Mitchell, et al.	Mar. 12, 1996	
	12	5,529,796		Gobbo, et al.	Jun. 25, 1996	
	13	5,571,334		Dunn, et al.	Nov. 5, 1996	
	14	5,576,039		Lewis	Nov. 19, 1996	
	15	5,656,734		Ehrlich	Aug. 12, 1997	
	16	5,866,190		Barey	Feb. 2, 1999	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No. ¹	FOREIGN PATENT DOCUMENT Office ³ Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶
[Signature]	17	EP 0 639 335 B1		Lelli, et al.	Jun. 17, 1998		
	18	WO 99/37685		Marr, et al.	Jul. 29, 1999		
	19	WO 00/08952		Madsen, et al.	Feb. 24, 2000		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
EXAMINER	[Signature]		DATE CONSIDERED 5-5-04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C. 20231.